

AFMC: Building Upon a Centennial Legacy

The men and women of Air Force Materiel Command and its predecessors enabled the United States to establish and maintain air superiority throughout the conflicts of the past century substantiated by the command's tremendous role in the current war on terrorism.

"Every sortie launched, every target confirmed, every bomb dropped and every radio contact completed in our war on terrorism happens because AFMC people continue to anticipate and meet the needs of America's warfighters," said General Lester L. Lyles, AFMC, commander.

During the current war on terrorism, "AFMC has addressed and forecasted the needs of the warfighter and with few exceptions we have exceeded their needs since then," said Lieutenant General Charles H. Coolidge, Jr., AFMC, vice commander. AFMC's people continue to demonstrate the innovation and dedication inspired by the Wright brothers, which led to the development of air and space resources used to defend the United States and its allies.

The United States Army Signal Corps, after establishing its Aeronautical Division, August 1, 1907, began to look at the potential of powered flight and its uses during war. In 1908, the Signal Corps announced a specification for an Army airship. It wanted an aircraft that could fly for two hours, carry two people and fly at a speed of at least 20 miles per hour.

By February of that year a contract with the Wrights was signed and the race for air superiority was on. According to the Air Force History Office, during the years before World War I, military leaders envisioned the airplane as a reconnaissance and artillery-spotting tool.

World War I proved the airplane was better suited as a weapons platform, and by the end of 1918 it was already performing strategic bombardment, interdiction, close air support and airlift missions.

Research and development of the airplane was well underway after the war and metal monoplanes with enclosed cockpits and retractable landing gear replaced fabric-skinned open-cockpit biplanes with fixed wheels. Army engineers designed large bombers and developed a doctrine for their use.

At the start of World War II the need for more advanced aircraft was evident. The result was faster, larger, higher-flying and longer-range airplanes. The war also brought about advances in jet propulsion, ballistic and cruise missiles, pressurized cabins and radar capabilities. The development of the atomic bomb secured the surrender of Japan and suggested that air power could be decisive in the outcome of wars.

World War II proved the importance of aviation to national defense, and just two years after the war, Congress created an independent United States Air Force.

The end of World War II led to a new kind of war deterring the advances of communist aggression. The new Air Force saw its first victory of the Cold War

when it sustained the people of Berlin, Germany with the largest airlift in history. Throughout the Cold War and still today Air Force airlift is a major part of humanitarian relief.

During the Cold War, Air Force researchers focused on the development of a strategic nuclear deterrent. Large bombers such as the B-36 and B-52 were developed and partnered with aerial tankers to give the United States the ability to bomb the Soviet Union in one day.

In 1957, the Soviet Union launched Sputnik, the world's first artificial space satellite, into orbit. The United States Air Force countered this achievement with the launch of Explorer I in early 1958 and the space race was on.

New developments in communications, navigation, intelligence and space exploration allowed both countries to explore beyond the earth, sending spacecraft to the moon, other planets and beyond the solar system. Boosters used to launch spacecraft were also used as intercontinental ballistic missiles, which served as a deterrent during the Cold War.

Wars in Korea and Vietnam introduced a new type of enemy. The countries were undeveloped with few strategic targets. New technologies were needed to meet the challenge of guerilla tactics used.

According to the Air Force History Office, among the more dramatic innovations were stealth airplanes, satellite-linked airborne warning and control system aircraft and extremely accurate, precision-guided munitions.

The new precision-guided weapons developed during the Cold War led to a quick victory during the 1991 Gulf War. By 1999, the NATO war with Serbia was conducted entirely with air assets. It was the first conflict to see the use of the B-2 Spirit stealth bomber and Predator unmanned aerial vehicle, which prepared the United States for the new war to come.

And now AFMC is meeting the challenges of war through transformation to provide increased capabilities to the warfighter. New processes of spiral development and horizontal integration shifted the focus from platform-centric to effects-based thinking, allowing capabilities to reach the battle space faster than ever.

Gen Lyles noted, "I am very proud of the work the men and women of AFMC do on a daily basis! Together, they power the Air Force by providing combat capability. Like their predecessors, they have created and sustained the tools for warfighter success in recent conflicts as well as today's Operations Enduring Freedom and Noble Eagle."

"Each of us must evolve with the global environment to meet the demands of future conflicts. We must make the cultural changes required to be successful. We must continue to deliver tomorrow's technologies in today's weapon systems, faster, cheaper and better," he said.

- by 2nd Lt Gailyn F. Whitman, AFMC Public Affairs



AFMC 2003 CALENDAR OF EVENTS

JANUARY

1 Jan - 31 Dec Mini Exhibits and Georgia Aviation Hall of Fame Pioneers — Robins AFB/ Museum
16 Jan - 31 Mar Aviation Art Exhibit - "Century of Flight" WPAFB/ USAF Museum

FEBRUARY

1 Feb - 1 Dec Museum Exhibit "The Aircraft Engine" Steam Powered to Supersonic Jet - 100 Years of Development Robins AFB /Museum

MARCH

22 Mar 30th Annual Base Community Dining Out
Tinker AFB, OK in Downtown Oklahoma City

APRIL

12 Apr-31 May Aviation Art Exhibit - "Air Power" WPAFB/ AF Museum

MAY

7-9 May SETP Flight Test Safety Workshop and Centennial of Flight Celebration "First Flights" — Edwards AFB, CA
10-11 May Airpower 2003 — WPAFB
11 May Air Force Band of Flight and Dayton Philharmonic Concert WPAFB/ Dayton Schuster Center
13-15 May National Aerospace Systems Technology Conference
WPAFB/ Dayton Convention Center

JUNE

21-22 Jun Centennial of Flight Air Show Arnold AFB/ Tullahoma Regional Airport
14 Jun Centennial of Flight Night at the Boston Pops Hanscom AFB
23 -28 Jun American Society of Aviation Artists exhibition Hill AFB, UT/ Museum
Summer Museum Exhibit: "The Epps family, Pioneers in Georgia Aviation, will include replica of 1908 Epps Flyer Robins AFB/ Museum
27 Jun Centennial of Flight Gala Celebration Hill AFB, UT
Summer Huffman Prairie Flying Field Renovation WPAFB/ Huffman Prairie
6 Jun-31 Jul Aviation Art Exhibit - "International Art" WPAFB/ AF Museum

JULY

4-6 Jul Remax Balloon Celebration (Partner Inventing Flight)
11-13 Jul International Blimp Meet (Partner

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Inventing Flight) WPAFB/ AF Museum
4 Jul Open House — Tinker AFB
3-20 Jul The Centennial Celebration (Sponsor Inventing Flight)
WPAFB/ Deeds Point-Dayton, OH
17-20 Jul Dayton Air Show (Sponsor Inventing Flight) WPAFB/ Dayton Airport
14-17 Jul International Air & Space Symposium and Exposition - "The Next 100 Years " — Dayton, OH

AUGUST

Aug-Sep Antelope Valley Fair — Edwards AFB
2 Aug Field of Dreams - near Gate 1B WPAFB
9 Aug 40th Anniversary Celebration of the YF-12A first flight — Edwards AFB/Blackbird Airpark, Palmdale, CA
26 Aug-30 Sep Aviation Art Exhibit - "Those Magnificent Flyers "
16 Aug Glenn Miller Tribute - Air Force Band of Flight
29-31 Aug Giant Scale Model Radio-Controlled Aircraft fly-in WPAFB/ AF Museum

SEPTEMBER

6-7 Sep Air Show — Robins AFB
20 Sep Air Force Marathon — WPAFB
12-14 Sep Dawn Patrol Rendezvous World War I Fly-in
24-28 Sep U.S. Scale Masters Radio-Controlled Aircraft Championships
30 Sep-4 Oct American Kitefliers Assn Grand National KiteFestival
WPAFB/ AF Museum

OCTOBER

1-31 Oct Kern County Celebration of the Centennial of Flight — Edwards AFB/Kern County, CA
25 Oct Gathering of Eagles
25-26 Oct Air Show — Edwards AFB
4-12 Oct Albuquerque Balloon Festival Kirtland AFB/Balloon Fiesta Park
9 Oct-31 Dec Aviation Art Exhibit "Fly Me to the Moon" WPAFB/ AF Museum

NOVEMBER

15 Nov Centennial of Flight Gala Banquet
Hanscom AFB

DECEMBER

17 Dec Wright Brothers Memorial Celebration — WPAFB



